(1-Hydroxy-2,2,2-trichloroethyl)formamide

Other names:	Formamide, N-(2,2,2-trichloro-1-hydroxyethyl)-
	Chloral formamide
	Chloralamide
	N-(1-Hydroxy-2,2,2-trichloroethyl)formamide
	N-(2,2,2-Trichloro-1-hydroxyethyl)formamide
	Chloramide
Inchi:	InChI=1S/C3H4Cl3NO2/c4-3(5,6)2(9)7-1-8/h1-2,9H,(H,7,8)
InchiKey:	ACZVWYLTJHGUCP-UHFFFAOYSA-N
Formula:	C3H4Cl3NO2
SMILES:	O=CNC(O)C(Cl)(Cl)Cl
Mol. weight [g/mol]:	192.43
CAS:	515-82-2

Physical Properties

Property code	Value	Unit	Source
gf	-207.96	kJ/mol	Joback Method
hf	-350.84	kJ/mol	Joback Method
hfus	16.66	kJ/mol	Joback Method
hvap	63.58	kJ/mol	Joback Method
log10ws	-1.47		Crippen Method
logp	0.421		Crippen Method
mcvol	107.270	ml/mol	McGowan Method
pc	5022.80	kPa	Joback Method
tb	567.67	K	Joback Method
tc	772.57	K	Joback Method
tf	356.23	K	Joback Method
vc	0.405	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	208.10	J/mol×K	567.67	Joback Method
cpg	213.12	J/mol×K	601.82	Joback Method
cpg	217.68	J/mol×K	635.97	Joback Method

cpg	221.84	J/mol×K	670.12	Joback Method
cpg	225.60	J/mol×K	704.27	Joback Method
cpg	229.02	J/mol×K	738.42	Joback Method
cpg	232.13	J/mol×K	772.57	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C515822&Units=SI

Legend

cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume